

## CLAIMS:

1. A projection video system, comprising:  
a control system (301) for receiving an input video stream, wherein the control system splits the video stream into a first and a second group of image components;  
an electronic paper screen system (303, 304) for generating images created by  
5 the first group of image components;  
a projector system (302) for projecting images created from the second group of image components onto the electronic paper screen.
2. The projection video system as claimed in claim 1, wherein said first group of  
10 image components has coarse-feature, static high contrast image components.
3. The projection video system as claimed in claim 1, wherein said second group of image components has fine-feature, fast moving colored components.
- 15 4. The projection video system as claimed in claim 1, further comprising:  
a compensation unit (409) for creating a compensation signal which is combined with the second group of image components before being projected onto the electronic paper screen.
- 20 5. The projection video system as claimed in claim 4, wherein said compensation signal compensates for different display attributes between the projector and the electronic paper screen.
6. The projection video system as claimed in claim 4, wherein said compensation  
25 signal is added to each I-frame of the second group of image components.
7. The projection video system as claimed in claim 4, wherein said compensation signal is generated by

summing individual I-frame images generated for the first group of image components with an uncompensated monochrome I-frame image generated for the projection system,

subtracting the summed signal from the actual image.

5

8. The projection video system as claimed in claim 1, wherein said electronic paper screen generates a bounding box around the image on the electronic paper screen.

9. The projection video system as claimed in claim 8, wherein the bounding box is a black border.

10

10. A method of displaying a video image on an electronic paper screen, the method comprising the steps of:

15

dividing an input video image into a first group of image components and a second group of image components;

generating a first image on the electronic paper screen, using said first group of image components; and

projecting a second image onto the electronic paper screen, using said second group of image components, wherein the second image overlays the first image.

20

11. The method as claimed in claim 10, wherein said first group of image components has coarse-feature, static high contrast image components.

12. The method as claimed in claim 10, wherein said second group of image components has fine-feature, fast moving colored components.

25

13. The method as claimed in claim 10, further comprising the step of:  
creating a compensation signal which is combined with the second group of image components before being projected onto the electronic paper screen.

30

14. The method as claimed in claim 13, wherein said compensation signal compensates for different display attributes between the projector and the electronic paper screen.

15. The method as claimed in claim 13, wherein said compensation signal is added to each I-frame of the second group of image components.

16. The method as claimed in claim 13, wherein said compensation signal is  
5 generated by  
summing individual I-frame images generated for the first group of image components with an uncompensated monochrome I-frame image generated for the projection system,  
subtracting the summed signal from the actual image.

10

17. The method as claimed in claim 10, wherein said electronic paper screen generates a bounding box around the image on the electronic paper screen.

15

18. The method as claimed in claim 10, wherein the bounding box is a black border.

20

19. The method as claimed in claim 10, further comprising the step of:  
compressing the first group of image components and the second group of image components after dividing the input video image.

20. The method as claimed in claim 19, further comprising the step of:  
compressing said first group of image components a second time to remove spatial details that cannot be rendered on the electronic paper screen.